UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,990	03/05/2002	Ron Rymon	02/23292	4478

		EXAMINER
7590 08/04/2005		HOANG, PHUONG N

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ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _25 April 2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1 - 26_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1 - 26_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 26 are pending for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1 – 12, 17 – 19, and 25 - 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shandony, US patent no. 6,675,261.**

4. **As to claim 1,** Shandony teaches a pattern recognition apparatus for grouping nodes according to relationships with other nodes, the apparatus comprising the steps of:

an input for receiving an management of nodes, the arrangement comprising at least two partitions (groups of users and set of resources, col. 7 lines 63 – col. 8 lines 30) of the nodes and with predetermined relationships (user access to specific resource of set of resources) between nodes across the partitions, and

a pattern recognition unit (entity system, col. 7 and 8) associated with the input

for using pattern recognition on the nodes and the relationships to find relationship

patterns among the nodes thereby to form at least one group from nodes (group of

users) of a first of the partition, wherein the nodes being formed into the group

relationship with same ones of a predetermined number of resources in a second

partition (user access to specific resource or set of resources).

Shandony does not explicitly teach that the set of resources being as nodes.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to recognize that set of resources would have the functionalities as

nodes that keep the resources that has a predetermined relationship with the first group

of nodes.

5.   **As to claims 2 - 5**, Shandony teaches the step of wherein the nodes in the first

partition are users of a network (users of a network, col. 7 lines 63 - col. 8 lines 25, and

col. 5 lines 20 – 30) the nodes in the second partition are resources (resources) of the

network and the relationships are access permissions (allowed to access to particular

resources), and the relationships are usage levels of respective resources by respective

users.

6.   **As to claim 6**, Shandony teaches the step of wherein the nodes in the first

partition are entities (users are entities, col. 6 lines 65 – 67, and col. 7 lines 63 - col. 8

lines 25) having attributes (have resources after they get access) and the nodes in the

second partition represent the attributes (resources are attributes or data, col. 7 lines 1 – 5), and the relationships represent a respective user possessing a respective attribute.

7. .   **As to claim 7**, Shandony teaches the step of wherein the pattern recognition unit is associated with a search engine (group manager 44, col. 7 lines 63 - col. 8 lines 30) operable to use a search tree to begin with a single resource (group of user access to specific resource,) and its associated users, and iteratively to add resources and remove users (deletion of users) not having a predefined relationship with the iteratively added resources (only add user when they need to access to application they need), to meet a resource number, or a user number constraint.

8.   **As to claims 8 and 9**, Shandony teaches the step of wherein the search engine is operable to use a homogeneity measure for determine (group of users need identical access to specific resource, col. 7 lines 63 - 8 lines 30) whether to consider a candidate grouping in the search (multi-step workflows can define which users must obtain approval before being added to a group).

9.   **As to claim 10**, Shandony teaches the step of wherein the search engine is operable within the iterative stages (user can be added, col. 8 lines 10 – 30) to add further resources common to a current get of users.

10.   **As to claim 11**, Shandony teaches the step of wherein the search engine is

operable to compute a set of all users related to a current set of resources (users need

identical access to specific resource, col. 7 lines 63 - 8 lines 30).

11.   **As to claim 12**, Shandony teaches the step of the search engine is operable to

consider for expansion all resources outside the current of resources (resources 22 is

external ... accessible to a user on a network, col. 5 lines 58 – 67) that have at least

one relationship connection with a current set of users.

12.   **As to claim 17**, Shandony teaches the step of wherein the pattern recognition

unit is operable to use the partition recognition within an iterative tree searching process

(query, col. 9 lines 15 – 30).

13.   **As to claim 18**, Shandony teaches the step of wherein the pattern recognition

unit is operable to insert (add user, col. 8 lines 10 – 30) the groupings as an

intermediate partition amongst the nodes thereby to redefine the relationships through

the groupings.

14.   **As to claim 19**, Shandony teaches the step of wherein the nodes are arranged

into three partitions, an intermediate one of the partitions (group manager 44, col. 7 and

8) comprising predetermined relationship dependent groupings of at least some of the

nodes in a first of the partitions, the pattern recognition unit being operable to use the

pattern recognition to add new groups to the intermediate partition.

15.   **As to claim 25**, this is the method claim of claim 1. See rejection for claim 1

above.

16.   **As to claim 26**, this is the product claim of claim 1. See rejection for claim 1

above.

17.   **Claims 13 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Shandony, US patent no. 6,675,261 in view of Riddle, Pub. No. 2003/0061263.

18.   **As to claims 13 - 16**, Shandony teaches log value (log-on, col. 6 lines 55 – 60,

and col. 9 lines 5 – 20, and col. 7 lines 64 – 67), controlling the groups (which user is in

the groups, col. 7 and 8), wherein the set of users associated with each of the nodes is

associated with attributes (when user access to resources, col. 8 lines 10 – 30).

Shandony does not explicitly teach the step of wherein the homogeneity measure

is the percentage of occurrence of given attribute, multiplied by the log value thereof,

summed over all such users in the result.

Riddle teaches the sum of users accessing to attributes (total number of active

users accessing to resources, [00180]).

It would have been obvious to one of skill in the art at the time the invention was made to combine the teaching of Shandony and Riddle's system because Riddle's sum of user would provide the total of user in the specific groups that access the attributes.

19.   **Claims 20 - 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shandony, US patent no. 6,675,261 in view of Brown, US patent no. 5,941,947.**

20.   **As to claim 20**, Shandony does not explicitly teach the step of wherein the input is associated with a graphical expositors which presents the input in a graph.

Brown teaches the steps of wherein the graphical expositor presents the input in a graph (acyclic graphs, col. 12 lines 51 – col. 13 line 38).

. It would have been obvious to one of skill in the art at the time the invention was made to combine the teaching of Shandony and Brown's system because Brown's graph would provide the tree structure of the system with partitioned groups on different levels for easy controlling access.

21.   **As to claim 21**, Shandony modified by Brown teaches the step of wherein the graphical exposistor is user interactive to manually (Shandony; IF statff can assign .... Add new users, col. 7 lines 45 – 50) assign modify the groupings discovered by the pattern recognition engine.

22.   **As to claims 22 - 23**, Brown teaches the steps of wherein the graphical

expositor is further operable to partition the graph into sub-graphs (acyclic graphs, col.

12 lines 51 – col. 13 line 38), each of the sub-graphs itself being a mentioned graph

having at least two partitions, sub-graphs being limited to it subset of the nodes in one

of the partitions, and further comprising all the nodes in the other partition that are linked

thereto, and wherein the pattern recognition unit is further operable to perform

groupings on each of the sub-graphs, and then to merge the results into a full graph.

It would have been obvious to one of skill in the art at the time the invention was

made to combine the teaching of Shandony and Brown's system because Brown's

graph would provide the tree structure of the system with partitioned groups on different

levels for easy controlling access.

23.   **As to claim 24**, see rejection for claim 21 above.

Response to Arguments

24.   Applicant's arguments filed 4/25/05 have been fully considered but they are not

persuasive.

25.   Applicant argued in substance that

(1)   Shandony does not teach the claimed limitation "method and apparatus

for **automatic** grouping by shared resource utilization and more particularly but

not exclusively to grouping of users into roles according to their access rights to

shared resources, typically but again not exclusively over a network" as required

by claim 1.

26.   Examiner respectfully disagree with applicant's remark

As to point 1, Examiner did not see anywhere in claim 1 claiming the method

mention above done automatically. In fact, dependent claims 21 and 24 claimed

the method is done manually. Shadony teaches the method grouping by shared

resource utilization and more particularly but not exclusively to grouping of users

into roles according to their access rights to shared resources, typically but again

not exclusively over a network (groups of users and set of resources, col. 7 lines

63 – col. 8 lines 30) of the nodes and with predetermined relationships (user

access to specific resource of set of resources). This method can be done both

automatically (users can be automatically added or removed, col. 8 lines 10 – 30)

and manually (IT staff can assign applicant access, whereas department

manager can add new users, col. 7 lines 45 – 50).

Conclusion

27.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

28.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Phuong N. Hoang whose telephone number is

(571)272-3763. The examiner can normally be reached on Monday - Friday 9:00 am to

5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571)272-3756. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Ph
December 23, 2004

SUE LAO
PRIMARY EXAMINER